

PATENT COOPERATION TREATY

PCT

INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference PCTA9511-715	FOR FURTHER ACTION see Form PCT/ISA/220 as well as, where applicable, item 5 below.	
International application No. PCT/KR2005/003923	International filing date (day/month/year) 18 NOVEMBER 2005 (18.11.2005)	(Earliest) Priority Date (day/month/year) 23 NOVEMBER 2004 (23.11.2004)
Applicant Korea Research institute of Bioscience and Biotechnology et al		

This International search report has been prepared by this International Searching Authority and is transmitted to the applicant according to Article 18. A copy is being transmitted to the International Bureau.

This international search report consists of a total of 4 sheets.

☐ It is also accompanied by a copy of each prior art document cited in this report.

1. Basis of the report

a. With regard to the **language**, the international search was carried out on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.

☐ The international search was carried out on the basis of a translation of the international application furnished to this Authority (Rule 23.1(b)).

b. ☒ With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, see Box No. I.

2. ☐ **Certain claims were found unsearchable** (See Box No. II)

3. ☐ **Unity of invention is lacking** (See Box No. III)

4. With regard to the **title**,

☒ the text is approved as submitted by the applicant.

☐ the text has been established by this Authority to read as follows:

5. With regard to the **abstract**,

☒ the text is approved as submitted by the applicant.

☐ the text has been established, according to Rule 38.2(b), by this Authority as it appears in Box No. IV. The applicant may, within one month from the date of mailing of this international search report, submit comments to this Authority. *MJ*

6. With regard to the **drawings**,

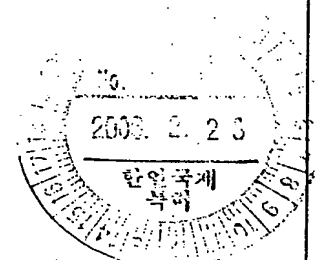
a. the figure of the **drawings** to be published with the abstract is Figure No. 3

☒ as suggested by the applicant.

☐ because the applicant failed to suggest a figure.

☐ because this figure better characterizes the invention.

b. ☐ none of the figure is to be published with the abstract.



INTERNATIONAL SEARCH REPORT

International application No.

PCT/KR2005/003923

Box No. 1 Nucleotide and/or amino acid sequence(s) (Continuation of item 1.b of the first sheet)

1. With regard to any nucleotide and/or amino acid sequence disclosed in the international application and necessary to the claimed invention, the international search was carried out on the basis of :

a. type of material



a sequence listing



table(s) related to the sequence listing

b. format of material



on paper



in electronic form

c. time of filing/furnishing



contained in the international application as filed



filed together with the international application in electronic form



furnished subsequently to this Authority for the purposes of search

2. ☐ In addition, in the case that more than one version or copy of a sequence listing and/or table relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.

3. Additional comments:

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International application No.

PCT/KR2005/003923

A. CLASSIFICATION OF SUBJECT MATTER*C12N 15/85(2006.01)i, C12N 15/00(2006.01)i, C12N 15/63(2006.01)i, C07H 21/02(2006.01)i, A01H 5/00(2006.01)i*

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC8 C12N 15/85, C12N 15/63, C12N 15/00, C12N 5/00, A01K 33/00

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Korean Patents and Applications for Inventions since 1975

Korean Utility Models and Applications for Utility Models since 1975

Japanese Utility Models and Applications for Utility Models since 1975

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

eKIPASS, WPI, USPTO, PAJ, NCBI, CAPLUS(STN), INSPECT "gene, targeting, vector, homologous recombination, Somatic Cell Nuclear Transfer, SCNT, bovine, animal, eukaryotic, casein, milk, exogenous, target, protein, producing, mammary, gland etc."

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	Sheng Wu Gong Cheng Xue Bao (Shen, W., CN) May 2004 - see the abstract	1-13
Y	US 5741957 A (Deboer, HA., et al., US) 21 Apr 1998 - see abstract, claims - see col.3, l.43~col.15, l.55, (no patent family)	1-13
Y	US 6180761 A1 (Han, S., KR) 30 Jan 2001 - see col.3, ll.60~67	1-13
Y	US 2003/0024002 A1 (Colman, A., US) 30 Jan 2003 - see the entire document	1-13
A	US 2004/0168208 A2 (Karatzas, C., et al., CA) 26 Aug 2004 - see abstract, claims - see [0028], [0107]~[0147] (no patent family)	1-13
A	US 6713662 B1 (Karatzas, CN., et al., NL) 30 Mar 2004 - see the entire document (especially col.9, ll.11~22)	1-13

☐ Further documents are listed in the continuation of Box C.☒ See patent family annex.

* Special categories of cited documents:

"A" document defining the general state of the art which is not considered to be of particular relevance

"E" earlier application or patent but published on or after the international filing date

"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of citation or other special reason (as specified)

"O" document referring to an oral disclosure, use, exhibition or other means

"P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art

"&" document member of the same patent family


Date of the actual completion of the international search

15 FEBRUARY 2006 (15.02.2006)

Date of mailing of the international search report

16 FEBRUARY 2006 (16.02.2006)

Name and mailing address of the ISA/KR


 Korean Intellectual Property Office
 920 Dunsan-dong, Seo-gu, Daejeon 302-701,
 Republic of Korea

Facsimile No. 82-42-472-7140

Authorized officer

SHIN, Weon Hye

Telephone No. 82-42-481-5591



INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No.

PCT/KR2005/003923

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US06180761	30.01.2001	AU 4401397 A1 KR 1019980023846 A WO 98/12222A1	14 Apr 1998 06 Jul 1998 26 Mar 1998
US 20030024002 A1	30 Jan 2003	AU 200029267 A1 CA 2361943 A1 EP 01159415 A2 NZ 514620 A US 06701327 A WO 00/51424 A2	21 Sep 2000 08 Sep 2000 05 Dec 2001 30 Apr 2004 02 Mar 2004 08 Sep 2000
US 06713662 A	30 Mar 2004	AU 3204795 A1 EP 0772404 A1 JP 10504715 T2 KR 1019970704874 A NZ 291042 A WO 96/03051 A1	22 Feb 1996 14 May 1997 12 May 1998 06 Sep 1997 23 Dec 1998 08 Feb 1996